

TC 31-29/A

U.S. ARMY SPECIAL FORCES  
CACHING TECHNIQUES  
U.S. ARMY  
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## CACHING

Caching is the process of hiding equipment or materials in a secure storage place with the view to future recovery for operational use. The ultimate success of caching may well depend upon attention to detail, that is, professional competence that may seem of minor importance to the untrained eye. Security factors, such as cover for the caching party, sterility of the items cached, and removal of even the slightest trace of the caching operations are vital. Highly important, too, are the technical factors that govern the preservation of the items in usable condition and the recording of data essential for recovery. Successful caching entails careful adherence to the basic principles of clandestine operations, as well as familiarity with the technicalities of caching.

### Section 1

#### Caching Considerations

Caching considerations that are vital to the success of the caching operation may be done in a variety of operational situations. For example, cached supplies can meet the emergency needs of personnel who may be barred from their normal supply sources by sudden developments or who may need travel documents and extra funds for quick escape. Caching can help solve the supply problems of long-term operations conducted far from a secure base.

Caching also can provide for anticipated needs of wartime operations in areas likely to be overrun by the enemy.

#### PLANNING FOR A CACHING OPERATION

Caching involves selecting items to be cached, procuring those items, and selecting a cache site. Selection of the items to be cached requires a close estimate of what will be needed by particular units for particular operations. Procurement of the items usually presents no special problems. In fact, the relative ease of procurement before an emergency arises is one of the prime considerations in favor of caching. When selecting a cache site, planners should always ensure that the site is accessible not only for emplacement, but also for recovery. When planning a caching operation, the planner must consider seven basic factors.

## 1. Purpose and Contents of the Cache

Planners must determine the purpose and contents of each cache because these basic factors influence the location of the cache, as well as the method of hiding. For instance, small barter items can be cached at any accessible and secure site because they can be concealed easily on the person once recovered.

However, it would be difficult to conceal rifles for a Guerrilla Band once recovered. Therefore, this site must be in an isolated area where the band can establish at least temporary control. Certain items, such as medical stock, have limited shelf life and require rotation periodically or special storage considerations, necessitating easy access to service these items. Sometimes it is impossible to locate a cache in the most convenient place for an intended user. Planners must compromise between logistical objectives and actual possibilities when selecting a cache site. Security is always the overriding consideration.

## 2. Anticipated Enemy Action

In planning the caching operation, planners must consider the capabilities of any intelligence or security services not participating in the operation. They should also consider the potential hazards the enemy and its witting or unwitting accomplices present. If caching is done for wartime operational purposes, its ultimate success will depend largely on whether the planners anticipate the various obstacles to recovery, which the enemy and its accomplices will create if the enemy occupies the area. What are the possibilities that the enemy will preempt an ideal site for one reason or another and deny access to it? A vacant field surrounded by brush may seem ideal for a particular cache because it is near several highways. But such a location may also invite the enemy to locate an ordnance depot where the cache is buried.

## 3. Activities of the local Population

Probably more dangerous than deliberate enemy action are all of the chance circumstances that may result in the discovery of the cache. Normal activity, such as construction of a new building, may uncover the cache site or impede access to it. Bad luck cannot be anticipated, but it can probably be avoided by careful and imaginative observation of the prospective cache site and of the people who live near the site. If the cache is intended for wartime use, the planners must project how the residents will react to the pressures of war and conquest. For example, one of the more likely reactions is that many residents may resort to caching to avoid having their personal funds and valuables seized by the enemy. If caching becomes popular, any likely cache site will receive more than normal attention.

#### 4. Intended Actions by Allied Forces

Using one cache site for several clandestine operations involves a risk of mutual compromise. Therefore, some planners should rule out otherwise suitable caching sites if they have been selected for other clandestine purposes, such as drops or safe houses. A site should not be located where it may be destroyed or rendered inaccessible by bombing or other allied military action, should the area be occupied by the enemy. For example, installations likely to be objects of special protective efforts by the occupying enemy are certain to be inaccessible to the ordinary citizen. Therefore, if the cache is intended for wartime use, the caching party should avoid areas such as those near key bridges, railroad intersections, power plants, and munitions factories.

#### 5. Packaging and Transportation Assets

Planners should assess the security needs and all of the potential obstacles and hazards that a prospective cache site can present. They should also consider whether the operational assets that could be used for packaging and transporting the package to the site. Best results are obtained when the packaging is done by experts at a packaging center. The first question, therefore, is to decide whether the package can be transported from the headquarters or the field packaging center to the cache site securely and soon enough to meet the operational schedules. If not, the packaging must be done locally, perhaps in a safe house located within a few miles of the cache site. If such an arrangement is necessary, the choice of cache sites may be restricted by limited safe house possibilities.

#### 6. Personal Assets

All who participate directly in emplacement will know where the cache is located. Therefore, only the fewest possible and the most reliable persons should be used. Planners must consider the distance from the person's residence to the prospective cache site and what action cover is required for the trip. Sometimes transportations and cover difficulties require the cache site to be within a limited distance of the person's residence. The above considerations also apply to the recovery personnel.

#### 7. Caching Methods

Which cache method to use depends on the situation. It is therefore unsound to lay down any general rules, with one exception. Planners should always think in terms of suitability, for example, the method most suitable for each cache, considering its specific purpose; the actual situation in the particular locality; and the changes that may occur if the enemy gains control.

## Concealment.

Concealment requires the use of permanent man-made or natural features to hide or disguises the cache. It has several advantages. Both employment and recovery usually and be done with minimum time and labor, and cached items concealed inside a building or dry cave are protected from the elements. Thus, they require less elaborate packaging. Also, in some cases, a concealed cache can be readily inspected from time to time to ensure that it is still usable. However, there is always the chance of accidental discovery in addition to all the hazards of wartime that may result in discovery or destruction of a concealed cache or denial of access to the site. The concealment method, therefore, is most suitable in cases where an exceptionally secure site is available or where a need for quick access to the cache justifies a calculated sacrifice in security.

Concealment may range from securing small gold coins under a tile in the floor to walling up artillery in caves.

## Burial.

Adequate burial sites can be found almost anywhere. Once in place, a properly buried cache is generally the best way of achieving lasting security. In contrast to concealment, however, burial in the ground is a laborious and time-consuming method of caching.

The disadvantages of burial are that-

- \* Burial almost always requires a high-quality container or special wrapping to protect the cache from moisture, chemicals and bacteria in the soil.
- \* Emplacement or recovery of a buried cache usually takes so long that the operation must be done after dark unless the site is exceptionally secluded.
- \* It is especially difficult to identify and locate a buried cache.

## Submersion.

Submersion sites that are suitable for secure concealment of a submerged cache are few and far between. Also, the container of a submerged cache must meet such high standards for waterproofing and resistance to external pressure that the use of field expedients is seldom workable. To ensure that a submerged cache remains dry and in place, planners must determine not only the depth of the water, but the type of bottom, the currents, and other facts that are relatively difficult for nonspecialists to obtain. Emplacement, likewise requires a high degree of skill. At least two persons are needed for both emplacement and requires additional equipment. In view of the difficulties - especially the difficulty of recovery - the submersion method is suitable only on rare occasions. The most noteworthy usage is the relatively rare maritime re-supply operation where it is impossible to deliver supplies directly to a reception committee. Caching supplies offshore by

submersion is often preferable to sending a landing party ashore to bury a cache.

## SELECTION OF THE SITE

The most careful estimates of future operational conditions cannot ensure that a will cache will be accessible when it is needed. However, criteria for a site selection can be met when three questions are answered.

### Criteria for Site Selection

Can the site be located by simple instructions that are unmistakably clear to someone who has never visited the location? A site may be ideal in every respect, but if it has no distinct, permanent landmarks within a readily measurable distance it must be ruled out. Are there at least two secure routes to and from the site? Both primary and alternate routes should provide natural concealment so that the emplacement party and the recovery party can visit the site without being seen by anyone normally in the vicinity. An alternate escape route offers hope of avoiding detection and recovered at the chosen site in all seasons? Snow and frozen ground create special problems.

Snow on the ground is a hazard because it is impossible to erase a trail in the snow. Planners must consider whether seasonal changes in the foliage will leave the site and the dangerously exposed.

### The Map Survey

Finding a cache site is often difficult. Usually, a thorough systematic survey of the general area designated for the cache is required. The survey is best done with as large-scale map of the area as is available. By scrutinizing the map, the planners can determine whether a particular sector must be ruled out because of its nearness to factories, homes, busy thoroughfares, or probable military targets in wartime. A good military-type map will show the positive features in the topography; proximity to adequate roads or trails, natural concealment (for example: surrounding woods or groves), and adequate drainage. A map also will show the natural and man-made features in the landscape. It will provide the indispensable reference points for locating a cache site: confluences of streams, dams and waterfalls, road junctures and distance markers, villages, bridges, churches, and cemeteries.

### The Personal Reconnaissance

A map survey normally should show the location of several promising sites within the general area designated for the cache. To select and pinpoint the best site, however, a well-qualified observer must examine each site firsthand. If possible, whoever examines the site should carry adequate maps, a compass, a drawing pad or board for making sketch maps or tracings, and a metallic measuring line. (A wire knotted at regular intervals is adequate for measuring. Twine or cloth measuring tapes should not be used because stretching or shrinking will make them inaccurate if they get wet.) The

observer should also carry a probe rod for probing prospective burial sites, if the rod can be carried securely. Since the observer seldom completes a field survey without being noticed by local residents, his action cover is of great importance. His cover must offer a natural explanation for his exploratory activity in the area. Ordinarily, this means that a n observer who is not a known resident of the area can pose as a tourist or a newcomer with some reason for visiting the area. However, his action cover must be developed over an extended period before he undertakes the actual reconnaissance. If the observer is a known resident of the area, he cannot suddenly take up hunting, fishing, or wildlife photography without arousing interest and perhaps suspicion. But he must build up a reputation for being a devotee of his sport or hobby.

### Reference Points

When the observer finds a suitable cache site, he prepares simple and unmistakable instructions for locating the reference points. These instructions must identify the general area (the names of general recognizable places, from the country down to the nearest village) and an immediate reference point. Any durable landmark that is identified by its title or simple description can be immediate reference point (for example, the only Roman Catholic church in a certain village or the only bridge on a named road between two villages). The instructions must also include a final reference point (FRP), which must meet four requirements:

- (1) It must be identifiable, including at least one feature that can be used as a precise reference point.
- (2) It must be an object that will remain fixed as long as the cache may be used.
- (3) It must be near enough to the cache to pinpoint the exact location of the cache by precise linear measurements from the FRP to the cache
- (4) It should be related to the immediate reference point by a simple route description, which proceeds from the immediate reference point to the FRP

Since the route description should be reduced to the minimum essential, the ideal solution for locating the cache is to combine the immediate reference point and the FRP into one landmark readily identifiable, but sufficiently secluded. The following objects, when available, are sometimes ideal reference points: small, unfrequented bridges, and dams, boundary markers, kilometer markers and culverts along unfrequented roads, a geodetic survey marker, battle monuments, and wayside shrines. When such reference points are not available at an otherwise suitable cache site, natural or man-made objects may serve as FRP's: distinct rocks, posts for power or telephone lines, intersections in stone fences or hedgerows, and gravestones in isolated cemeteries.

## Pinpointing Techniques

Recovery instructions must identify the exact location of the cache. These instructions must describe the point where the cache is placed in terms that relate in to the FRP. When the concealment method is used, the cache ordinarily is placed inside the FRP, so it is pinpointed by a precise description of the FRP. A submerged cache usually is pinpointed by describing exactly how the moorings are attached to the FRP. With a buried cache, any of the following techniques may be used.

Placing the cache directly beside the FRP. The simplest method is to place the cache directly beside the FRP. Then pinpointing is reduced to specifying the precise reference point of the FRP. Sighting the cache by projection, This method may be used if the FRP has one flat side long enough to permit precise sighting by projecting a line along the side of the object. The burial party places the cache a measured distance along the sighted line. This method may also be used if two precise FRP's are available, by projecting a line sighted between the two objects. In either case, the instructions for finding the cache must state the approximate direction of the cache from the FRP. Since small errors in sighting are magnified as the sighted line is extended, the cache should be placed as close to the FRP as other factors permit. Ordinarily this method becomes unreliable if the sighted line is extended beyond 50 meters.

Placing the cache at the intersection of measured lines. If two FRP's are available within several paces, the cache can be one line projected from each of the FRP's. If this method is used, state the approximate direction of the cache from each FRP . To ensure accuracy, neither of the projected lines (from the FRP's to the point of emplacement) should be more than twice as long as the base line (between the two FRP's). If this proportion is maintained, the only limitation upon the length of the projected lines is the length of the measuring line that the recovery party is expected to carry. The recovery party should carry two measuring lines when this method is used.

Sighting the cache by compass azimuth. If the above methods of sighting are not feasible, one measured line may be projected by taking a compass azimuth from the FRP to the point where the cache is placed. To avoid confusion, use an azimuth to a cardinal point of the compass (north, east, south, or west).

Since compass sightings are likely to be inaccurate, a cache that is pinpointed by this method should not be placed more than 10 meters from the FRP.

## Measuring Distances

The observer should express all measured distances in a linear system that the recovery party is sure to understand - ordinarily the standard system for the country where the cache is located. He should use whole numbers (6 meters, not 6.3 or 6.5, etc.) to keep his instructions as brief and as simple as possible. To get an exact location for the cache in whole numbers, take sightings and measurements first. If the surface of the ground between the points to be measured is uneven,

the linear distance should be measured on a direct line from point to point, rather than by following the contour of the ground. This method requires a measuring line long enough to reach the full distance from point to point and enough to be pulled taut without breaking.

### Marking Techniques

The emplacement operation can be simplified and critical time saved if the point where the cache is to be buried is marked during the reconnaissance. If a night burial is planned, the point of emplacement may have to be marked during a daylight reconnaissance. This method should be used whenever operational conditions permit. The marker must be an object that is easily recognizable but that is meaningless to an unwitting observer. For example, a small rock or a branch with its butt placed at the point selected for the emplacement may be used.

During a personal reconnaissance, the observer must not only pinpoint the cache site, but also gather all the incidental information required for planning the emplacement operation. It is especially important to determine the best route to the site and at least one alternate route, the security hazards along these routes, and any information that can be used to overcome the hazards.

Since this information is also essential to the recovery operation, it must be compiled after emplacement and included in the final cache report. Therefore, the observer should be thoroughly familiar with the Twelve-Point Cache Report before he starts a personal reconnaissance. This report is a checklist for the observer to record as much information as possible. Points 6 through 11 are particularly important. The personal reconnaissance also provides an excellent opportunity for a preliminary estimate of the time required for getting to the site.

### The Alternate Site

As a general rule, planners should select an alternate site in case unforeseen difficulties prevent use of the best site. Unless the primary site is in a completely deserted area, there is always some danger that the emplacement party will find it occupied as they approach, or that the party will be observed as they near the site. The alternate site should be far enough away to be screened from view from the primary site, but near enough so that the party can reach it without making a second trip.

### The Concealment Site

A site that looks ideal for concealment may be revealed to the enemy for that very reason. Such a site may be equally attractive to a native of an occupied country to hide his valuables. The only real key to the ideal concealment site is careful casing of the area combined with great familiarity with local residents and their customs. The following is a list of likely concealment sites:



\*Natural caves and caverns, and abandoned mines and quarries.

\*Walls (hidden behind loose bricks or stones or hidden a plastered surface).

\*Abandoned buildings.

\*Infrequently used structures (stadiums and other recreational facilities, and railroad facilities on spur lines).

\*Memorial edifices (mausoleums, crypts, monuments).

\*Public buildings (museums, churches, libraries).

\*Ruins of historical interest.

\*Culverts.

\*Sewers.

\*Cable conduits.

The concealment site must be equally accessible to the person emplacing and the person recovering. However, visits by both persons to certain interior sites may be incompatible with the cover. For instance, a site in a house owned by a relative of the emplacer may be unsuitable because there is no adequate excuse for the recovery person to enter the house if he has no connection with the owner.

The site must remain accessible as long as the cache is needed. If access to a building depends upon a personal relationship with the owner, the death of the owner or the sale of the property might render it inaccessible. Persons involved in the operation should not be compromised if the cache is discovered on the site. Even if a cache is completely sterile, as every cache should be, the mere fact that it has been placed in a particular site may compromise certain persons. If the cache were discovered by the police, they might suspect the emplacer because it was found in his relative's house. The site must not be located where potentially hostile persons frequently visit. For instance, a site in a museum is not secure if police guards or curious visitors frequently enter the museum.

To preserve the cache material, the emplacer must ensure the site is physically secure for the preservation of the cached material. For example, most buildings involve a risk that the cache may be destroyed or damaged by fire, especially in wartime. The emplacer should consider all risks and weigh them against the advantages of an interior site. A custodian may serve to ease access to a building or to guard a cache. However, the use of such a person is inadvisable, as a custodian poses an additional security risk. He may use the contents of the cache for personal profit or reveal its location.

## The Burial Site

In selecting a burial site, consider the following factors along with the basic considerations of suitability and accessibility:

### Drainage

This includes the elevation of the site and the type of soil. The importance of good drainage makes a site on high ground preferable unless other factors rule it out. Moisture is one of the greatest natural threats to the contents of a cache. Swamp